Filing Date: March 29, 2004 Title: WIRELESS ACCESS POINT POWER CONTROL

## IN THE CLAIMS

Please amend the claims as follows:

- 1-5. Canceled
- 6. (Currently Amended) A method comprising: transmitting a beacon frame in a wireless network; receiving a signal from a mobile station; and measuring a received signal strength of the signal received from the mobile station; receiving a remote transmit power value from the mobile station; determining a path loss as the difference between the remote transmit power and the

determining a new access point output power value from the path loss; and

adjusting an setting the access point output power to the new access point output power

value to reliably communicate with the mobile station, wherein adjusting an setting the access
point output power comprises reducing the output power of frames other than beacon frames.

(Canceled)

received signal strength;

- (Currently Amended) The method of claim 6 wherein adjusting an setting the access
  point output power further comprises transmitting beacon frames at a maximum power.
- 9-10. (Canceled)
- 11. (Original) The method of claim 9 further comprising receiving a signal from a second mobile station
- 12. (Original) The method of claim 11 further comprising calculating a second path loss to the second mobile station.

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- (Currently Amended) The method of claim 12 further comprising adjusting setting the
  output power to overcome a greater of the first path loss and the second path loss.
- 14. (Currently Amended) A method comprising: transmitting a beacon frame from an access point at a full power level; and receiving at the access point a signal from an associated station; estimating a sensitivity of the associated station;

determing a new access point power level from the sensitivity of the associated station, wherein the new access point power level is less than the full power level; and

transmitting frames other than beacon frames from the access point at <del>less than the full</del> the new access point power level.

- 15. (Original) The method of claim 14 wherein transmitting frames other than beacon frames comprises transmitting at a power level high enough to overcome a path loss to an associated mobile station.
- 16. (Original) The method of claim 15 further comprising adjusting the power level when the associated mobile station disassociates.
- (Original) The method of claim 15 further comprising adjusting the power level when another mobile station associates.
- 18. (Original) The method of claim 14 further comprising periodically readjusting the power level.
- (Currently Amended) The method of claim 18 wherein periodically adjusting the power level comprises determining a path loss to a sensitivity an associated mobile station.

20. (Currently Amended) An apparatus including a medium to hold machine-accessible instructions that when accessed result in a machine performing:

transmitting a beacon frame from an access point at a full power level; and receiving at the access point a signal from an associated station; estimating a sensitivity of the associated station:

determing a new access point power level from the sensitivity of the associated station, wherein the new access point power level is less than the full power level; and

transmitting frames other than beacon frames from the access point at less than the full the new access point power level.

- 21. (Original) The apparatus of claim 20 wherein transmitting frames other than beacon frames comprises transmitting at a power level high enough to overcome a path loss to an associated mobile station.
- 22. (Original) The apparatus of claim 21 wherein machine-accessible instructions, when accessed, result in the machine further performing adjusting the power level when the associated mobile station disassociates.
- 23. (Original) The apparatus of claim 21 wherein machine-accessible instructions, when accessed, result in the machine further performing adjusting the power level when another mobile station associates.
- (Currently Amended) An electronic system comprising: an antenna:
  - a variable output power radio interface coupled to the antenna;
- a processing apparatus coupled to the variable output power radio interface to receive link margin values from associated stations, to determine a reduced output power from the link margin values, and to periodically adjust an output power to the reduced output power to reduce potential interference while communicating with associated mobile stations, by reducing the output power of frames other than beacon frames; and

an Ethernet interface coupled to the processing apparatus.

## 25. (Canceled)

26. (Original) The electronic system of claim 25 wherein transmitting frames other than beacon frames comprises transmitting at a power level high enough to overcome a path loss to an associated mobile station.